Telehealth consultations have helped our institution provide continuity of care to older adults who would otherwise decline healthcare attendances due to fears of contracting COVID-19. This has enabled us to identify problems early to institute care and avoid unnecessary admissions to prevent strain on the healthcare system. Notably, telehealth consultations decreased rapidly after reaching a peak of 43% of total consultations when a partial lockdown was instituted. The rate of telehealth usage returned to approximately the same levels as those seen in the general medicine clinic. This may have occurred as community transmission of COVID-19 was brought under more control with the partial lockdown, and patients and caregivers were not as fearful of venturing out as compared with the start of partial lockdown. However, this shows that with the right incentives and strategies or during times of resurgence of pandemics, a significant proportion of older adults are able to engage in the use of telehealth to minimize risks and maximize benefits. As more older adults and their caregivers become familiar with telehealth, it is likely that use of this service will only increase. Further study into the factors for and against use of technology in older adults is warranted to tailor interventions for this group better.

However, there are drawbacks and limitations of telehealth. Clinical examination and assessment are important in caring for older adults who may present atypically.4 If during the teleconsultation the attending physician decides on the need for an in-person review, the teleconsultation fee is waived and an in-person review is arranged. Urgent cases are referred to the emergency department for timely assessment. Not all older adults have blood pressure machines at home. Interval, longitudinal measurement of vital signs and parameters such as weight and body mass index are important in the holistic management of older adults. Opportunities for such baseline measurements are curtailed with teleconsultations. Risks of privacy and data breaches exist for all modes of telecommunication<sup>5</sup> and regulations tend to play catch up to the rapid pace of technological development. In recognition of the need for education and instruction of physicians using telehealth platforms, the Ministry of Health (Singapore) recently launched an online course and guidelines to ensure uniformity of standards across telehealth practices. Careful patient selection is thus important to accrue maximum benefits of teleconsultation to older adults.

While telehealth services have been developed before the COVID-19 pandemic, the fears and public health impact of the pandemic have fortuitously led to the increased uptake of telehealth services among older adults. This group is likely to benefit greatly from telehealth due to the convenience, time and travel savings. The greater uptake has led to greater familiarity among staff on the workflows and benefits of telehealth consultations. A growing critical mass of telehealth utilization allows institutions to devote more resources to developing telehealth services and would

enable us to take advantage of the rapid gains and benefits of technology. This would only bring greater benefits to patients and the healthcare system.

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### Disclosure statement

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# Vaccine mandate in long-term care facilities

Keywords: COVID-19, geriatrics, long-term care facilities, medical ethics, vaccine policy.

Dear Editor,

The COVID-19 pandemic revealed the vulnerability of elderly people in long-term care facilities (LTCFs). In the United States, one of the first COVID-19 outbreaks was in an LTCF. In this facility, 101 of 130 facility residents were infected and 34 residents

have died.<sup>1</sup> Nursing home residents make up <0.5% of the US population, but about a fifth of deaths from COVID-19 in the United States have been tied to LTCFs.<sup>2</sup> Care homes across Europe are also battling to stop the spread of COVID-19 among the elderly. According to the WHO Regional Director for Europe,

up to half of those who have died from COVID-19 in countries within the WHO European Region were estimated to be residents in LTCFs.<sup>3</sup> Similar outbreaks were also seen in other countries.<sup>4</sup>

When faced with several elderly patients with fever, it is important to examine whether they were infected with COVID-19, as high mortality is observed in the older population. However, various infectious diseases cause fever in the population, such as aspiration pneumonia, influenza, pneumococcal pneumonia and urinary tract infection. To make a diagnosis, patients, their families or facility nurses are asked if the elderly patients are vaccinated against influenza or pneumococcus. The answers are not always "yes." Apparently, there are not many cases in which the patients were vaccinated against both.

Influenza and pneumococcus vaccine are proved effective for lowering mortality in the elderly. Making vaccination a standard part of the LTCF admission process does increase vaccination rates in nursing homes, and it is recommended by the Department of Health and Human Services.<sup>5</sup> In a 2018 survey, 61% of US citizens indicated that nursing homes should definitely require influenza vaccination for residents.<sup>6</sup> Vaccine mandates for children,<sup>7</sup> youths<sup>8</sup> and healthcare workers<sup>9</sup> have been discussed, but in contrast ethical grounds of vaccine mandates for the elderly in LTCFs have not been widely discussed.

Underlying health conditions, decline of cognitive ability and even their advanced age make residents of LTCFs at most risk for severe symptoms or death from infectious diseases. There are many interactions between the residents and the staffs, and among residents. Residents dine at the same table and have a conversation, and participate in daily group activities. Even in facilities such as assisted living, which have separated flats or bungalows, residents interact through activities. These interactions make the facility vulnerable to infectious diseases, but one must not forget that living in LTCFs provides the residents with a comfortable environment, which makes them feel like being in one's own home. LTCFs are not only facilities for care, but also living space for residents. LTCFs are also referred to as nursing homes and in the case of Japan, they are called "roujin-houmu," which means "homes for elderly." In this sense, LTCFs are different from hospitals in a way that they are similar to a small community, which is characterized by physical proximity and daily interactions of the vulnerable members.

When entering this community, newcomers are required to take existing residents' health into consideration. We can apply the discussion of vaccine mandate for immigrants. When entering the United States, immigrants need to be vaccinated against airborne infectious diseases and this requirement is ethically justified. The Harm Principle should also be applied to the LTCF setting.

Many elderly people are exempt from vaccine on medical grounds. Therefore, if some residents are not vaccinated, the vaccine rate will not be enough to keep herd immunity. Thus, we need to make sure to avoid free-riders within the LTCF population.

Vaccines for COVID-19 are undergoing clinical trials, but we still do not know if these vaccines are going to be effective. Some researchers point out that the COVID-19 vaccine may not work on the elderly because of their immunosenescence. The elderly are typically given a larger dose of the flu vaccine, so there is a possibility that larger doses of COVID-19 vaccines are required for the elderly. However, when any vaccines that can prevent infection in elderly people are developed, vaccinating LTCF residents against COVID-19 should be a requirement.

There are some issues to be kept in mind before implementation of vaccine mandates. First, legal aspects should be examined in some countries where vaccine refusals in LTCFs are permitted. Second, even if vaccinations in LTCFs become mandatory, providing education regarding the benefits and potential side effects of the immunization is important. Trust between doctors and residents holds the key to success. Third, vaccinations for care workers should be required, and vaccinations for visitors should be recommended.

Whether COVID-19 will become a seasonal infectious disease is not clear at the moment. However, there is an urgent need to discuss vaccination mandates for residents in LTCFs. The MMR vaccine before school enrollment has saved many children. We should consider vaccine requirements for the elderly in LTCFs.

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